

**Rezek, Henry, Meisenheimer and Gende, Inc.**

SML Rebuttal Test. Ex. 01

CONSULTING ENGINEERS

**Del-Mar Woods Subdivision  
and Route 22  
Watermain Replacement  
Utilities, Inc.  
Engineers Preliminary Opinion of Probable Costs**

Project No. 20301050

Nov. 7, 2002

Item	Description	Quantity	Unit	Unit Cost	Extended Cost
1.	6" Water Main installed by Horizontal Directional Drilling Method, including pavement patching & lawn restoration, at services, valves, hydrants and HDD access pits	7100	LF	\$66.00	\$468,600.00
2.	6" Valve and Vault	12	EA	2,700.00	32,400.00
3.	Tapping Valve and Vault	1	EA	3,900.00	3,900.00
4.	Blow-off Hydrant and Valve Assembly	3	EA	1,600.00	4,800.00
5.	1" Service Connection Type K (Long)	22	EA	1,800.00	39,600.00
6.	1" Service Connection Type K (Short)	64	EA	800.00	51,200.00
7.	Traffic Control	1	LS	3,000.00	3,000.00
Subtotal Water					\$603,500.00
Engineering					42,200.00
Total Water					<u>\$645,700.00</u>

NOTE: 1. Estimate does not include cost of easements, permits, rights of access or soil borings.

2. It is assumed there is adequate space to construct the Watermain in all Road Right-of-Ways (i.e. no conflict with existing utilities).

3. It is assumed there are no unusual sub-surface conditions.

4. Actual construction costs will vary. Historical unit costs have been used.

5. Estimate does not include incidental road restoration costs.

6. Estimate does not include cost for mitigating, or for constructing Watermain across wetlands (if any).

7. Additional construction costs may be incurred if unstable soils or unfavorable ground water conditions are encountered.

8. Estimate based on installation of flushing hydrants. Additional cost for fire hydrants is approximately \$40,000 which includes several additional hydrants to provide fire protection coverage as well as additional costs for more expensive fire hydrants.

9. Estimate based on 6-in watermain. Additional cost for 8-in watermain is approx. \$40,000.